DOCUMENT RESUME

ED 266 487 CS 209 590

AUTHOR Frayer, Bill
TITLE The Feasibility Report: Teaching Report Writing at a Two-Year Technical Institute.
PUB DATE Oct 85
NOTE 11p.; Paper presented at the Annual Meeting of the Northeast Regional Conference on English in the Two-Year College (20th, Portland, ME, October 24-26, 1985).
PUB TYPE Reports - Descriptive (141) -- Guides - Classroom Use - Guides (For Teachers) (052) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Course Content; *Feasibility Studies; Higher Education; Student Research; Teaching Methods; *Technical Writing; Two Year Colleges; *Writing Exercises; *Writing Instruction

ABSTRACT

The practical nature of technical writing is one of several concepts illustrated by the feasibility report assignment used in a technical writing course at Central Maine Vocational Technical Institute. As much as possible, the class is set up to simulate a work environment, including handouts printed as memos on letterhead paper. Students are assigned to find a person or business that is considering some expansion, purchase, or project and then offer to conduct an investigation on the feasibility of the project. Students must clearly evaluate the suitability of their topics, and carefully plan the scope of their assignment. Three times throughout the semester they must also submit specific in-progress sections of the report, which are graded. During the research phase of the project, students can discuss problems that arise with the class. In addition to outside research in the form of letters of inquiry and interviews, students must prepare an annotated bibliography from their library research, develop a working outline for their report, and provide two alternate outlines prior to turning in their final outline. By this time, students can put together a very readable report. Two oral presentations are also required during the course of the project. Among other benefits, this assignment provides students with an opportunity for writing in a real world situation, helps them develop creative strategies for finding needed information, and provides tangible evidence of each student's ability. (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED266487

THE FEASIBILITY REPORT:

TEACHING REPORT WRITING

AT A

TWO-YEAR TECHNICAL INSTITUTE

Bill Frayer

Central Maine Vocational Technical Institute

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

William Frayer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS209590

At the first session of the 1981 Technical Writing Institute for Teachers at Rensselaer Polytechnic Institute, Frank Hammet recounted a story about a teacher who was asked to settle a dispute between a student and his physics professor over an examination question. The professor had asked the class to explain how to measure the height of a tall building with the aid of a barometer. This student had come up with many answers to the question, none of which used atmospheric pressure, but all of which demonstrated considerable ingenuity. The story climaxed with my favorite solution: take the barometer to the basement of the building, knock on the superintendent's door, and say to him "Greetings Mr. Superintendent. Here I have a very fine barometer. If you will tell me the exact height of this building, I will give you this barometer."

Since hearing this story, I have been opening each of my advanced technical writing sections by telling it on the first day of class, because it demonstrates a concept that will be invaluable to them in the assignment I am about to have them write--a feasibility report. They are about to begin this semester-long project, during which they will have to search for facts to determine whether or not a real life project is practical. For most of my two-year technical students, English courses have not been very "real life" up to this point in their careers. Practical problems seem to have little correlation to the writing many of them have done in the past. Consequently, they are very reluctant to apply common sense solutions to their writing and research problems. Somehow they sense it is "cheating" to ask the superindendent for the height of the building. They assume I will expect them to use books, rather than people, for their research.

The practical nature of technical writing is one of several concepts the feasibility report assignment is designed to illustrate. In this paper I will explain how I conduct this fifteen week class project, and why I believe it is an ideal assign-

ment for two-year technical students at the associate degree level.

I am fortunate to teach two levels of technical writing at my institution. All two-year students take a basic technical writing course which is equivalent, in level, to most freshman composition courses. All writing assignments have a strong business and technical emphasis, and include basic technical description, short report writing, and correspondence. All students who are enrolled in the A.A.S. program must complete a second technical writing course, which includes both formal report writing and oral presentation, each focusing on the feasibility report assignment.

The class is set up, as much as possible, to simulate a work environment. Although this charade can be distracting if carried too far, I think that, if used judiciously, it contributes to an atmosphere of trust and professionalism. All my handouts to students are printed as memos on letterhead bearing the name of our fictitious corporation, Technical Writing Consultants, Inc.[1] Each student is provided with a supply of this stationary at the beginning of the semester, and they use it to submit cover memos to me with all their assignments.

The text I use, Houp and Pearsall's Reporting Technical Information,[2] is particularly well suited to the feasibility report assignment. It includes excellent chapters on research techniques, and offers plenty of format and style examples, including a sample feasibility report in the appendix.

THE ASSIGNMENT

My instructions to the students for the feasibility report assignment are that they should find some actual person or business which is actually considering some expansion, purchase, or project, and offer to conduct an investigation on the feasibility of the project. Not all of the "clients" are originally enthusiastic about the project, but that is relatively unimportant. What matters is that each student has a "live" client

who has certain assets and limitations, and who, preferably, sets his or her own criteria as to what would be considered an acceptable expense or risk for the project. I closely supervise the topic selection process during the first several weeks of the course.

It is extremely important that the students clearly evaluate the suitability of their topics, and carefully plan the scope of their investigation. The first semester I used this assignment I allowed a student to report on the feasibility of the U.S. government subsidizing the Chrysler Corporation! My poor judgement in approving such a monumental topic caused the student a good deal of frustration, and resulted in some mid-semester adjustments which should not have been necessary. Although biting off more than one can chew is one obvious pitfall, just as frequent a mistake is choosing a topic which looks good on the surface, but proves to have too little substance. An example is the student whose father owns a hardwood lot, and cuts firewood to sell in his spare time. The student proposed to determine if it would be feasible for his father to purchase a skidder, a very expensive piece of equipment for hauling timber from the woods. Unless the client is in business, and has an established market for his wood, the purchase of a skidder would be an obvious luxury. Even if the client were in business, it would only take the student a short time to determine the feasibility of such a purchase, certainly not an entire semester. I usually schedule individual conferences to discuss the students' proposed topics, and do my best to weed out the obviously unsuitable ones.

One technique I use throughout the course, which my students find particularly aggravating, but which I find very useful, is the requirement that they submit to me specific in-progress sections of the report three times throughout the semester. These works-in-progress, or benchmarks, as we call them,

are graded, and carry a significant weight in their overall course grade. In keeping with the work environment simulation, the deadlines for these benchmarks are not scheduled during a regular class period, but are set at noon on Fridays of predesignated weeks throughout the semester.No benchmarks are accepted after the Friday noon deadline.

The first benchmark, due after the student has clearly defined his or her topic, generally includes a description of the client's situation (for my benefit, not included in the final report), a purpose and scope statement, and a list of proposed research sources. A carefully prepared purpose and scope statement is essential, because it sets the criteria for the entire project, and prevents the student from wasting much time in unproductive research. In preparation for this, I have the students write several purpose and scope statements, on different topics in class, for practice.

RESEARCHING

After the topic has been clearly defined, research can begin. I urge all students to begin their research early, and not limit themselves to library research. Some students actually end up using the library very little. We cover the standard research techniques in class, including letters of inquiry, questionnaires, and information seeking interviews. Despite this preparation, many have a difficult time knowing where to begin, and come to class with the familiar complaint, "I can't find any information on this topic." I like to, as much as possible, use the class as a forum for discussing these kinds of problems. Often, other students in the class are more helpful than I in helping the "stuck" student solve his or her research problem. Discussing these problems in class also helps other students come up with ideas about how to obtain information for their own investigations.

Although many topics require a good deal of outside research,

many obviously demand substantial library research as well. Although most students have been exposed to the latter in previous courses, many dislike it, and tend to avoid any type of literature search. To remedy this, I generally require them to prepare an annotated bibliography on a subject related to their topic, quite early in the semester. The bibliography must include at least five sources, using no less than one technical book, one periodical, and one reference work. This assignment usually gives them a good start on their research, and has the added benefit of introducing abstract writing, which will save time later on.

ORGANIZING

The next major hurdle, and it is a major one, is to have the students develop a thorough and useful outline for their report. A good deal of time, both in and out of class, is essential for this, because many students have a very poor sense of how to organize such a variety and volume of information.

One technique that works well for illustrating the process involved in organizing material is a class brainstorming session. This is done orally, in class, with a topic that most students are already familiar with. I select a topic such as "the feasibility of someone purchasing a new or used automobile" (far too simple a topic for an actual feasibility report, but quite useful as a class exercise). I have one of the students conduct a brainstorming session, listing all possible facts to be included in the report on the blackboard. After we have filled the board with a sufficient collection of data, I break the class into groups, nad have each goup come up with an outline for the feasibility study. Each group writes their outline on an overhead transparency, and presents it to the class for discussion. We discuss outlines in reference to usability for the reader, completeness, and logical development.

Before submitting their final outline, as part of the second benchmark, the students are required to submit two alternate outlines for their report.[3] Preparing a second outline forces them to examine their logic, and look at their facts

from a different perspective. The final outline often uses elements from both of the earlier drafts.

In addition to the final outline, the second benchmark, due about eight weeks into the semester, includes evidence of research that the student has completed up to this point. This not only gives me a good indication of who is procrastinating, but also allows me to make comments concerning possible areas for further research. Also included at this time is a list of illustrations to be included in the final report. By this time the student should be able to determine which factual information should be presented in graphic form, or should be supplemented by graphics. We spend a good deal of time in class discussing advantages and applications of various graphic formats.

WRITING

After the final outline has been developed, most students who have conducted their research thoroughly find that they can, quite easily, put together a very readable report. Houp and Pearsall's text gives excellent information on the necessary mechanical and prose elements, allowing me to simply assign those chapters, and not spend a great deal of class time on these areas.

The one exception is documentation. To many students, documentation is an incomprehensible method, devised by scholars, to make report writing more complex than it needs to be. Instead of having the students use standard footnote or endnote notation, I have them use parenthetical insertions, generally used for scientific and research papers, eg. (Smith, 1981), for both print and live sources. All sources listed in the bibliography are arranged by last name of author or interviewee. This simplified documentation system makes sense to the students, and they use it well.

The final benchamrk consists of the rough draft, complete with preliminary illustrations, and is due about three weeks before the end of the semester. This enables me to point out areas of ommission or weakness for final revision. I pay par-

ticular attention to the correlation of graphics to the appropriate section of the body of the paper, and to any areas that will require further research or documentation.

By this time in the semester, the students, most of whom have been disgusted with me for being so uncompromising about their progress and thoroughness on their benchmarks (often to the detriment of their grade point average), finally begin to see the value of the assignment, and often admit excitement at the prospect of producing a professional report. For many, the final typed report represents an accomplishment they did not consider possible at the beginning of the course.

SPEAKING

Two oral presentations, also related to the feasibility reprot, are required as a major component of the course. The first, a progress report, is given after they have finished their final outline. Class is convened as a meeting, and each student takes a turn presenting the purpose and scope of his or her investigation, and reveals the planned report development, using simple visual aids as necessary. The purpose of this progress report is not only to give the student an opportunity to speak in front of the class, in a realistic setting, but also to solicit feedback from the group. The student is expected to outline any problems he or she is having generating the necessary information, and, as I said before, this often generates useful guidance from the other students.

The final oral feasibility report is presented to the class during the final two weeks of the course. This is a detailed 10-15 minute presentation, with the other students playing the roles of the client's representatives. Visual aids are used extensively, and the students are expected to conduct a question and answer session at the conclusion of the presentation.

CONCLUSIONS

For the two-year technical student, who has already had exposure to basic technical or occupational writing, the feasibility report assignment offers an ideal opportunity to learn the principles of formal report preparation. From my experience, the assignment offers several advantages which would be difficult to match in a more segmented course format:

1. Most obviously, the assignment provides an excellent opportunity for the student to write in a real world situation. All of the parameters and decisions involved in preparing the report are defined in terms of a real client's real situation.
2. Investigating the facts requires that the student develop creative, often original strategies for finding out what he or she needs. No two reports are alike, and no two require the same research strategy.
3. Completing the investigation forces many students to confront communication situations they would have previously avoided. They learn that telephones don't bite, busy people won't laugh at you, libraries are comprehensible, and good letters get responses.
4. Many students have little experience or knowledge outside their own area of expertise. The feasibility report assignment often requires that they cross disciplines, and learn about technical areas with which they were previously unfamiliar. This often indirectly involves many members of the technical faculty in the technical writing course.
5. Finally, the report provides each student with tangible evidence of his or her achievement, which often solicits genuine praise from the student's client. Many students have been quite surprised when their clients have decided to go ahead with their projects on the basis of the evidence presented in the feasibility reports.

NOTES

[1]Our institute, fortunately, has a Graphic Arts Technology program which runs a print shop on campus, allowing me this type of extravagance.

[2]Houp, Kenneth W., and Thomas E. Pearsall, Reporting Technical Information, Fourth Edition (Encino, CA: Glencoe Publishing Co., 1980)

[3]This idea, of having students write two alternate outlines, was suggested to me by Dr. Richard Brucher, who teaches a similar course at the University of Maine at Orono.